

**AMENDMENTS TO THE CLAIMS**

Claims 1-10. (Canceled).

11. (Currently Amended) A structure for creating chalcogenide integrated circuit devices, comprising:

a first ~~layer comprising~~ a conductive material overlying a substrate;

a chalcogenide ~~layer~~ material overlying the first ~~layer~~ conductive material;

a silver ~~layer~~ material overlying the chalcogenide ~~layer~~ material; and

a barrier ~~layer~~ material on the silver ~~layer~~ material, the barrier ~~layer~~ material being essentially transparent to radiation.

12. (Currently Amended) A structure for creating chalcogenide integrated circuit devices, comprising:

a first ~~layer~~ electrode overlying a substrate;

a chalcogenide ~~layer~~ material overlying the first ~~layer~~ electrode;

a metal ~~layer~~ material overlying the chalcogenide ~~layer~~ material; and

chalcogenide barrier ~~layer~~ material on the metal ~~layer~~ material, the barrier ~~layer~~ material being essentially transparent to radiation.

13. (Currently Amended) The structure of claim 12, wherein the chalcogenide barrier and the chalcogenide ~~layer~~ material are formed of the same material.

14. (Original) The structure of claim 12, wherein the same material is GeSe.

15. (Currently Amended) The structure of claim 13, wherein the metal ~~layer~~ material includes silver.

Claims 16-107. (Cancelled).

108. (Currently Amended) The structure of claim 11 wherein the barrier ~~layer~~material is transparent to light.
109. (Currently Amended) The structure of claim 12 wherein the barrier ~~layer~~material comprises germanium-selenide.
110. (Currently Amended) The structure of claim 11 wherein the barrier ~~layer~~material reduces agglomeration from the silver ~~layer~~material.
111. (Currently Amended) The structure of claim 11 wherein the silver ~~layer~~material is formed to a thickness in a range of about 100Å to about 200Å.
112. (Currently Amended) The structure of claim 11 wherein the barrier ~~layer~~material is formed to a thickness in a range of about 20Å to about 50Å.
113. (Currently Amended) The structure of claim 11 wherein the barrier ~~layer~~material is formed to a thickness of about 30Å.
114. (Currently Amended) The structure of claim 11 wherein the chalcogenide ~~layer~~material is formed to a thickness in a range of about 500Å to about 1000Å.

Claims 115-145. (Cancelled).